



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,252	06/20/2003	Terry R. Lee	501193.01	6693

7590 01/14/2005

Edward W. Bulchis, Esq.
DORSEY & WHITNEY LLP
Suite 3400
1420 Fifth Avenue
Seattle, WA 98101

EXAMINER

BATAILLE, PIERRE MICHE

ART UNIT	PAPER NUMBER
----------	--------------

2186

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/601,252

Applicant(s)

LEE ET AL.

Examiner

Pierre-Michel Bataille

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/14/04; 3/24/04; 1/20/04; 10/23/03; 6/20/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is taken in response to application filed December 20, 2004, which present claims 1-53 for examination.
2. The application is in condition for allowance except for the following formal matters. The documents of the Information Disclosure Statement (IDS) submitted December 20, 2004 have not been considered; therefore, the IDS form-1449 is pending certification as a form was not provided. Applicant is encouraged to resubmit the IDS.

Objection

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. The following are observed:

The specification should be amended to reflect the status of all co-pending or prior application to which the present application claims priority.

Claim 1 recites:

(a) "couple prefetch requests" in the paragraph starting with "a memory sequencer"; this feature is unclear as it would be clear for a physical element be coupled to another physical element.

Coupling a request or data read is unclear. Clarification is, therefore, required.

(b) "if the read data are stored" in the paragraph starting with "a data read control unit"; there is lack of antecedent basis for this limitation in the claim; it appears the claim should read "if data corresponding to the read memory request".

(c) "to couple the read data from the memory device" in the paragraph starting with "a data read control unit"; this feature is unclear as it would be clear for a physical element be coupled to another physical element.

Claim 3 recites: "to couple the data input from the memory device" in the paragraph starting with "a multiplexer"; this feature is unclear as it would be clear for a physical element be coupled to another physical element.

Claim 4 recites: "coupling a memory request to the memory device"; this feature is unclear as it would be clear for a physical element be coupled to another physical element.

Claim 5 recites: "couple prefetch requests to the memory device"; this feature is unclear as it would be clear for a physical element be coupled to another physical element.

Claim set 8-13, similarly recites "to couple prefetch requests" or "coupled memory requests", particularly in claims 8, 10-11 and 13; the

Art Unit: 2186

feature "coupling a memory request or data read" is unclear as it would be clear for a physical element be coupled to another physical element. It is however, understood that data are received and/or transmitted from one element to another element and/or transmitted/receives/read/written over a communication medium.

Claim 8, similar to claim 1, recites: "if the read data are stored in the prefetch buffer" (last paragraph); there is lack of antecedent basis for this limitation in the claim; it appears the claim should read "if data corresponding to the read memory request".

Claims 14-53 carry the same defects as noted above. Clarification is, therefore, required as well.

4. Please note that these are merely exemplary. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,076,139 (Welker) teaching multimedia computer architecture with multi-channel concurrent memory access.

Art Unit: 2186

US 6,751,703 (Chilton) teaching data storage systems and methods which utilize an on-board cache.

6. This application is in condition for allowance except for the following formal matters:

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (571) 272-4178. The examiner can normally be reached on Mon-Fri (9:30A to 6:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2186

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pierre-Michel Bataille
Primary Examiner
Art Unit 2186

January 6, 2005

PIERRE BATAILLE
PRIMARY EXAMINER